



# **EC-70-LHD**



The new eyevis EC-70-LHD is a modular rear-projection cube with a screen diagonal of 70" and full HD resolution (1920 x1080 pixels). The EC-70-LHD uses innovative LED technology for illumination. EC-70-LHD is a revolutionary development by eyevis and is completely produced in Germany. It is especially designed for applications which require a reliable 24/7 operation. The display technology is based on the DLP® technology (Digital Light Processing) by TEXAS INSTRUMENTS. This superior technology produces high-definition images of the highest quality.

Whether you want to display video data or more complex graphics – you will always get a pin sharp image. eyevis attached much importance on the possibility to use their cubes even in critical ambient light conditions or other challenging safety-related problems. The LHD version uses a 1-chip-DLP® projector with a display resolution of 1920 x 1080 pixels. The MTBF of the LED lights lamps is indicated by the manufacturer with >60,000 hours (equals more than six years continuous operation). Thanks to the use of LED light technology, wear parts, such as colour wheels and traditional lamps are no longer necessary. The use of the DLP® technology guarantees that there is no damage to the display, such as "ghost"-images or burn-in effects, even with continuous static images or fixed patterns.

Since the founding of the company ten years ago, eyevis has done a lot of pioneer work in the fields of continuously operating DLP® applications. Also ergonomic requirements calculation is carried by the high image quality.

In numerous tests and comparisons the DLP® technology turned out to be the most reliable for continuous operation. The lifetime of the DMD™ chips is about 150,000 hours (MTBF: 650,000 hours). Of course, all the other parts of the device share the same high standards. This results in low service and maintenance costs for our customers. The EC-70-LHD has a screen size of 1550 mm width and 872 mm height and is available with a standard "seamless" frame (0,3 mm).

Furthermore, many optimising options, guarantee stable image quality of all cubes for a long period of time through automatic adjustment of values for brightness, contrast and colour.

Therefore the new eyevis EC series allows realising completely flexible display walls, providing the highest colour fidelity, a maximum of brilliance and outstanding reliability. Optionally, there is an additional scaler board available with additional input possibilities and further enhancing features.



## ) ADVANTAGES OF EYEVIS EC CUBES

## Outstanding picture quality

- High contrast and best brightness
- · Colour uniformity and wide viewing angle
- Latest DLP® technology
- Best visibility in any lighting condition

### Integrated optimising options

- · Perfect system adjustment with eyeCube software
- · Fast and easy parameter setting
- Many status information available
- Optional Multi-Cube Colour-Brightness Adjustment

### Availability and reliability

- Extremely long lifetime of the LED lights
- Qualitative high value components
- Especially designed for continuous operation
- · Highly efficient maintenance-free heatpipe cooling

## Durability

- Durable and constant picture quality on all Cubes
- Modular, highly available display concept for 24/7 operation
- Low service and maintenance costs
- No wear parts as with traditional lamp systems

### **Ergonomics**

- Very low noise level
- No rainbow effects and other DLP-typical artefacts
- Flexible image quality, adjustable parameters
- · Completely dust-proof housing

## Precision screen concept

- Perfect viewing angle
- · Minimum gaps between cubes thanks to clipping method
- Very easy and fast installation

# ) EC-70-LHD







## ) ADVANTAGES COMPARED TO STANDARD LAMP/COLOUR WHEEL SYSTEMS

- ) Shorter turning-on and start-up sequence compared to conventional lamp systems.
- ) Real flicker-free representation without rainbow effects and therefore a more ergonomic and fatigue-free observation.
- ) Higher lifetime with low tear and wear effects, no common wear parts like lamps and colour wheels as with traditional systems.
- ) Much lower colour and brightness drifts over the life-time of the system, compared with traditional lamp systems.
- ) High light output and higher lifetime through special colour-interleave method.
- ) Improved representation of moving images.
- ) Higher attention to detail, through a better colour gamut and colour space depth.

## ) TECHNICAL SPECIFICATIONS

Туре:	EC-70-LHD, eyevisCube 70" LED with full HD resolution
Description:	Digital 70" DLP®-rear- projection unit, stackable and addible, for data and video representation
Resolution:	1,920 x 1,080 Pixel (full HD)
Processing:	1080P / 0.95 inch DMD@LVDS
Brightness:	typ. 185 cd/m² (max. 235 cd/m²)
Contrast Ratio:	1,500:1 (max. 5,000:1 dynamic contrast)
Brightness Uniformity:	≥95%
Image Size (WxH):	1 1550 x 872 mm) (ca. 70 inch / 177 cm screen diagonal)
Dimensions (WxHxD):	1550 x 1132 x 833 mm
Weight:	ca. 105 kg (incl. housing, projector engine, input box and screen element)
Inputs:	1x DVI-D, optional with Scaler Board: 2x RGB, 2x DVI, 2x Composite Video, 1x Y/C, 1xYUV, 1x S-Video
Projektion Screen:	Seamless CrossPrism Screen, viewing angle horizontal & vertical 180° (different screens on request)
Frame:	0.3 mm
Power Consumption:	250 Watt (typ.) at 110/240 VAC
Heat Dissipation:	853 BTU/h (typ.)
Median LED Lifetime:	>60,000 hrs under normal environmental conditions / L70B50 manufacturer information) (75,000 - 90,000 hrs in 'Low Power Operation Mode', i.e. additional 15,000 to 30,000 hrs depending on the amount of power reduction)
Software:	eyevisCubeManager

#### ) Environmental:

Temperature Conditions:	10-40° C / recommended 15 - 25 °C / for Seamless Screens 18 - 25 °C / Storage: 0 - 50 °C
Humidity:	0% - 80 % not condensating
Altitude:	0 - 3000 m
Geräuschemission:	≤ 36 dB

## ) Options:

- Different screen versions to suit the requirements of different fields of application
- Scaler Board (internal split controller up to 10x10 Matrix, with 2x DVI, 2x RGB, 2x Video)
- ACT Auto-Colour Tracking, auto-adjustment of brightness and colours for each display according to the adjusted values
- EYE-MSP Matrix-Shading-Processor integrated in cube
- EYE-MDP Matrix and Delay Processor integrated in cub
- EYE-SCP Shading and Colour Processor integrated in cube
- EC-MAS motorized geometry adjustment via IR remote control or PS2
- Network Board
- Service and Maintenance Contracts
- Different Basement Options: Standard Basement, Basements on Wheels, Basements on Rails, Anti-Vibration Basements





Hundsschleestrasse 23 • 72766 Reutlingen • Germany Phone: + 49 (0) 7121 43303 - 0 • Fax: + 49 (0) 7121 43303 - 22 www.eyevis.de • info@eyevis.de As at: 12.06.2013/V1.0 • Subject to change! All trademarks and registered trademarks are the property of their respective owners. Copyright © 2013 eyevis GmbH. All rights reserved.